

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

44 Human Secreted Proteins

the specification of which is filed on **August 5, 1999**, Application Serial No. **09/369,247**.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Priority Claimed
Yes No

(Number) (Country) (Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

	Filing Date	Appln No.
1.	09 FEB 1998	60/074,118
2.	09 FEB 1998	60/074,157
3.	09 FEB 1998	60/074,037
4.	09 FEB 1998	60/074,141
5.	09 FEB 1998	60/074,341

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/US99/02293
(Application Serial No.)

04 FEB 1999
(Filing Date)

Pending
(Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith Kenley K. Hoover (Reg. No. 40,302), James H. Davis (Reg. No. 40,582), Joseph Kenny (Reg. No. 43,710), and Michele Wales (Reg. No. 43,975) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20850.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are

punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor:

David W. LaFleur

Inventor's signature: *David W. LaFleur*

Date: 9/17/99

Residence: 3142 Quesada Street, N.W., Washington, DC 20015

Citizenship: US

Post Office Address: same as above

Full name of additional joint inventor:

Steven M. Ruben

Inventor's signature: *Steven M. Ruben*

Date: 9/19/99

Residence: 18528 Heritage Hills Drive, Olney, MD 20832

Citizenship: US

Post Office Address: same as above

Full name of additional joint inventor:

Craig A. Rosen

Inventor's signature: *Craig A. Rosen*

Date: 9/21/99

Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882

Citizenship: US

Post Office Address: same as above

Full name of additional joint inventor:

Paul A. Moore

Inventor's signature: *Paul A. Moore*

Date: 9/20/99

Residence: 19005 Leatherback Drive, Germantown, MD 20874

Citizenship: UK

Post Office Address: same as above

Full name of additional joint inventor:

Yanggu Shi

Inventor's signature: *Yanggu Shi*

Date: 9/20/99

Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878

Citizenship: CN

Post Office Address: same as above

Full name of additional joint inventor:

Hla Kyaw

Inventor's signature: *Hla Kyaw*

Date: 9/20/99

Residence: 520 Sugarbush Circle, Frederick, MD 21793

Citizenship: Burma

Post Office Address: same as above

Full name of additional joint inventor:

Ying-Fei Wei

Inventor's signature: *Ying-Fei Wei*

Date: 9/20/99

Residence: 242 Gravatt Drive, Berkeley, CA 94705

Citizenship: CN

Post Office Address: same as above

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

44 Human Secreted Proteins

the specification of which is filed on **August 5, 1999**, Application Serial No. **09/369,247**.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Priority Claimed
Yes _____ No _____

(Number) (Country) (Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

	Filing Date	Appln No.
1.	09 FEB 1998	60/074,118
2.	09 FEB 1998	60/074,157
3.	09 FEB 1998	60/074,037
4.	09 FEB 1998	60/074,141
5.	09 FEB 1998	60/074,341

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/US99/02293 04 FEB 1999 Pending
(Application Serial No.) (Filing Date) (Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith Kenley K. Hoover (Reg. No. 40,302), James H. Davis (Reg. No. 40,582), Joseph Kenny (Reg. No. 43,710), and Michele Wales (Reg. No. 43,975) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20850.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are

punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor: David W. LaFleur
Inventor's signature: _____ Date: _____
Residence: 3142 Quesada Street, N.W., Washington, DC 20015 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Steven M. Ruben
Inventor's signature: _____ Date: _____
Residence: 18528 Heritage Hills Drive, Olney, MD 20832 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Craig A. Rosen
Inventor's signature: _____ Date: _____
Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Paul A. Moore
Inventor's signature: _____ Date: _____
Residence: 19005 Leatherback Drive, Germantown, MD 20874 Citizenship: UK
Post Office Address: same as above

Full name of additional joint inventor: Yanggu Shi
Inventor's signature: _____ Date: _____
Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878 Citizenship: CN
Post Office Address: same as above

Full name of additional joint inventor: Hla Kyaw
Inventor's signature: [Signature] Date: 9/22/05
Residence: 520 Sugarbush Circle, Frederick, MD 21793 Citizenship: Burma
Post Office Address: same as above

Full name of additional joint inventor: Ying-Fei Wei
Inventor's signature: _____ Date: _____
Residence: 242 Gravatt Drive, Berkeley, CA 94705 Citizenship: CN
Post Office Address: same as above

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

44 Human Secreted Proteins

the specification of which is filed on **August 5, 1999**, Application Serial No. **09/369,247**.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Priority Claimed
Yes No

(Number) (Country) (Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

	Filing Date	Appln No.
1.	09 FEB 1998	60/074,118
2.	09 FEB 1998	60/074,157
3.	09 FEB 1998	60/074,037
4.	09 FEB 1998	60/074,141
5.	09 FEB 1998	60/074,341

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/US99/02293 04 FEB 1999 Pending
(Application Serial No.) (Filing Date) (Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith Kenley K. Hoover (Reg. No. 40,302), James H. Davis (Reg. No. 40,582), Joseph Kenny (Reg. No. 43,710), and Michele Wales (Reg. No. 43,975) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20850.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are

punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor: David W. LaFleur

Inventor's signature: _____ Date: _____
Residence: 3142 Quesada Street, N.W., Washington, DC 20015 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Steven M. Ruben

Inventor's signature: _____ Date: _____
Residence: 18528 Heritage Hills Drive, Olney, MD 20832 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Craig A. Rosen

Inventor's signature: _____ Date: _____
Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US
Post Office Address: same as above

Full name of additional joint inventor: Paul A. Moore

Inventor's signature: _____ Date: _____
Residence: 19005 Leatherback Drive, Germantown, MD 20874 Citizenship: UK
Post Office Address: same as above

Full name of additional joint inventor: Yanggu Shi

Inventor's signature: _____ Date: _____
Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878 Citizenship: CN
Post Office Address: same as above

Full name of additional joint inventor: Hla Kyaw

Inventor's signature: _____ Date: _____
Residence: 520 Sugarbush Circle, Frederick, MD 21793 Citizenship: Burma
Post Office Address: same as above

Full name of additional joint inventor: Ying-Fei Wei

Inventor's signature: Ying-Fei Wei Date: 9/28/99
Residence: 242 Gravatt Drive, Berkeley, CA 94705 Citizenship: CN
Post Office Address: same as above

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, **David W. LaFleur, Steven M. Ruben, Craig A. Rosen, Paul A. Moore, Yanggu Shi, Hla Kyaw, and Ying-Fei Wei**, hereby sell(s), assign(s) and transfer(s) to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his entire right, title and interest for the United States and all other countries, in and to the improvements(s) known as:

44 Human Secreted Proteins

for which application for United States Letters Patent was filed on **August 5, 1999**, and assigned **Serial No. 09/369,247**, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

The undersigned further agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and, when requested, without charge to but at the expense of Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on all such improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives all facts known to the undersigned relating to said improvements and the history thereof; and do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patent and all patents on said improvements in Assignee, its successors, assigns and representatives.

The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

The undersigned hereby grants the power to Kenley K. Hoover (Reg. No. 40,302); James H. Davis (Reg. No. 40,582), Joseph J. Kenny (Reg. No. 43,710) and Michele M. Wales (Reg. No. 43,975) all of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: David W. LaFleur Date: 9/12/99

Inventor's Signature: Steven M. Ruben Date: 9/19/99

Inventor's Signature:  Date: 9/21/99
Craig A. Rosen

Inventor's Signature: Paul A. Moore Date: 9/20/99
Paul A. Moore

Inventor's Signature:  Date: 9/20/99
Yanggu Shi

Inventor's Signature: _____ Date: _____
Hla Kyaw

Inventor's Signature: _____ Date: _____
Ying-Fei Wei

10062548 120502

Human Genome Sciences, Inc.
9410 Key West Avenue, Rockville, Maryland, 20850
Tel: 301-309-8504 Fax: 301-309-8439

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, **David W. LaFleur, Steven M. Ruben, Craig A. Rosen, Paul A. Moore, Yanggu Shi, Hla Kyaw, and Ying-Fei Wei**, hereby sell(s), assign(s) and transfer(s) to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his entire right, title and interest for the United States and all other countries, in and to the improvements(s) known as:

44 Human Secreted Proteins

for which application for United States Letters Patent was filed on **August 5, 1999**, and assigned **Serial No. 09/369,247**, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

The undersigned further agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and, when requested, without charge to but at the expense of Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on all such improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives all facts known to the undersigned relating to said improvements and the history thereof; and do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patent and all patents on said improvements in Assignee, its successors, assigns and representatives.

The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

The undersigned hereby grants the power to Kenley K. Hoover (Reg. No. 40,302); James H. Davis (Reg. No. 40,582), Joseph J. Kenny (Reg. No. 43,710) and Michele M. Wales (Reg. No. 43,975) all of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

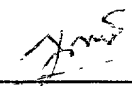
Inventor's Signature: _____ Date: _____
David W. LaFleur

Inventor's Signature: _____ Date: _____
Steven M. Ruben

Inventor's Signature: _____ Date: _____
Craig A. Rosen

Inventor's Signature: _____ Date: _____
Paul A. Moore

Inventor's Signature: _____ Date: _____
Yanggu Shi

Inventor's Signature:  _____ Date: 7/22/99
Hla Kyaw

Inventor's Signature: _____ Date: _____
Ying-Fei Wei

10063543 020502

Human Genome Sciences, Inc.
9410 Key West Avenue, Rockville, Maryland, 20850
Tel: 301-309-8504 Fax: 301-309-8439

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, **David W. LaFleur, Steven M. Ruben, Craig A. Rosen, Paul A. Moore, Yanggu Shi, Hla Kyaw, and Ying-Fei Wei**, hereby sell(s), assign(s) and transfer(s) to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his entire right, title and interest for the United States and all other countries, in and to the improvements(s) known as:

44 Human Secreted Proteins

for which application for United States Letters Patent was filed on **August 5, 1999**, and assigned **Serial No. 09/369,247**, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

The undersigned further agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and, when requested, without charge to but at the expense of Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on all such improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives all facts known to the undersigned relating to said improvements and the history thereof; and do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patent and all patents on said improvements in Assignee, its successors, assigns and representatives.

The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

The undersigned hereby grants the power to Kenley K. Hoover (Reg. No. 40,302); James H. Davis (Reg. No. 40,582), Joseph J. Kenny (Reg. No. 43,710) and Michele M. Wales (Reg. No. 43,975) all of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: _____ Date: _____
David W. LaFleur

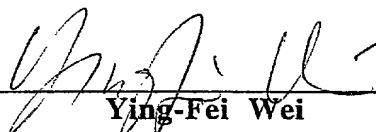
Inventor's Signature: _____ Date: _____
Steven M. Ruben

Inventor's Signature: _____ Date: _____
Craig A. Rosen

Inventor's Signature: _____ Date: _____
Paul A. Moore

Inventor's Signature: _____ Date: _____
Yanggu Shi

Inventor's Signature: _____ Date: _____
Hla Kyaw

Inventor's Signature:  _____ Date: 9/28/99
Ying-Fei Wei

Human Genome Sciences, Inc.
9410 Key West Avenue, Rockville, Maryland, 20850
Tel: 301-309-8504 Fax: 301-309-8439